

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) An isolated polynucleotide comprising a polynucleotide encoding the polypeptide of claim 17, or chosen from:
 - a) ~~a polynucleotide encoding a polypeptide having at least 95% identity to SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof,~~
 - b) ~~a polynucleotide encoding a polypeptide having at least 98% identity to SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof,~~
 - c) ~~a polynucleotide encoding a polypeptide having at least 99% identity to SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof,~~
 - d) ~~a polynucleotide encoding a polypeptide comprising SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof,~~
 - e) ~~a polynucleotide encoding a polypeptide capable of raising antibodies having binding specificity for a polypeptide comprising SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof,~~
 - f) ~~a polynucleotide encoding an epitope bearing portion of a polypeptide comprising SEQ ID No : 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof,~~

~~g) a polynucleotide comprising SEQ ID No : 1, 3, 5, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43 or fragments or analogs thereof,~~

~~h) a polynucleotide that is complementary theretoto a polynucleotide in (a), (b), (c), (d), (e), (f) or (g).~~

2. (canceled)

3. (canceled)

4. (canceled)

5. (currently amended) An isolated polynucleotide ~~comprising a sequence that~~ hybridizes under stringent conditions to the polynucleotide of claim 1 ~~either~~

~~a) a DNA sequence encoding a polypeptide or~~

~~b) the complement of a DNA sequence encoding a polypeptide, wherein said polypeptide comprises SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof.~~

6. (canceled)

7. (canceled)

8. (canceled)

9. (canceled)

10. (currently amended) The polynucleotide of claim 5 ~~that hybridizes under stringent conditions to either~~

~~a) a DNA sequence encoding a polypeptide or~~

~~b) the complement of a DNA sequence encoding a polypeptide,~~
wherein said polypeptide comprises at least 10 contiguous
amino acid residues from a polypeptide comprising SEQ ID
NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42
or[[,]] 44 ~~or fragments or analogs thereof.~~

11. (canceled)

12. (canceled)

13. (canceled)

14. (currently amended) A vector comprising the
polynucleotide of claim 3 ~~anyone of claims 1 to 13,~~
wherein said polynucleotide [[DNA]] is operably linked to
an expression control region.

15. A host cell transfected with the vector of claim 14.

16. (currently amended) A process for expressing the
polypeptide from the vector of claim 14 ~~producing a~~
~~polypeptide~~ comprising culturing the[[a]] host cell
according to claim 15 under conditions suitable for
expression of said polypeptide.

17 (currently amended) An isolated polypeptide comprising
a polypeptide chosen from:

a) a polypeptide having at least 95% identity to an amino
acid sequence comprising SEQ ID NO: 2, 4, 6, 22, 24, 26,
28, 30, 32, 34, 36, 38, 40, 42 or[[,]] 44 ~~or fragments or~~
~~analogous thereof;~~

- b) a polypeptide having at least 98% identity to an amino acid sequence comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or [[,]] ~~44 or fragments or analogs thereof~~;
- c) a polypeptide having at least 99% identity to an amino acid sequence comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or [[,]] ~~44 or fragments or analogs thereof~~;
- d) a polypeptide comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or [[,]] ~~44 or fragments or analogs thereof~~;
- e) a polypeptide consisting essentially of SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or 44;
- f) a polypeptide capable of raising antibodies having binding specificity for a polypeptide comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or [[,]] ~~44 or fragments or analogs thereof~~;
- g) an epitope bearing portion of a polypeptide comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42 or [[,]] ~~44 or fragments or analogs thereof~~;
- h) the polypeptide of (a), (b), (c), (d), (e), or (f) or (g) wherein the N-terminal Met residue is deleted;
- i) the polypeptide of (a), (b), (c), (d), (e), or (f) or (g) wherein the secretory amino acid sequence is deleted; or
- j) a polypeptide which is an immunogenic fragment or immunogenic analog of the polypeptide of (a), (b), (c), (d), (e), (f) or (g).

18. (canceled)

19. (canceled)

20. (canceled)

21. (currently amended) A chimeric polypeptide comprising the polypeptide of claim 17 ~~two or more polypeptides comprising SEQ ID NO: 2, 4, 6, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44 or fragments or analogs thereof,~~ provided that the polypeptides are linked with another polypeptide so as to form an immunogenic[[a]] chimeric polypeptide.

22. (canceled)

23. (currently amended) A pharmaceutical composition comprising the[[a]] polypeptide of claim 17 ~~according to any one of claims 17 to 20~~ and a pharmaceutically acceptable carrier, diluent or adjuvant.

24. (currently amended) A pharmaceutical composition comprising the chimeric[[a]] polypeptide of claim 21 ~~according to any one of claims 21 to 22~~ and a pharmaceutically acceptable carrier, diluent or adjuvant.

25. (currently amended) A method for prophylactic or therapeutic treatment of *S. pyogenes* infection in a host susceptible to *S. pyogenes* infection comprising administering to said host a prophylactic or therapeutic amount of the[[a]] composition according to claim 23.

26. (currently amended) The[[A]] method according to claim 25[[23]] wherein the host is a neonate, an infant, or a

child, an immunocompromised host, an adult, or an elderly person.

27. (canceled)

28. (canceled)

29. (canceled)

30. (currently amended) A method for prophylactic or therapeutic treatment of S. pyogenes infection in a host susceptible to S. pyogenes infection comprising administering to said host a prophylactic or therapeutic amount of the[[a]] composition according to claim 24.

31. (currently amended) A method for prophylactic or therapeutic treatment of infections in a host, including pharyngitis, erysipelas, impetigo, scarlet fever, and invasive diseases such as bacteremia and necrotizing fasciitis comprising administering to said host a therapeutic or prophylactic amount of a composition according to claim 23.

32. (currently amended) A method for diagnosis of S. pyogenes infection in a[[an]] host susceptible to S. pyogenes infection comprising
a) obtaining a biological sample from the[[a]] host;
b) incubating an antibody or fragment thereof reactive with the[[a]] polypeptide according to claim ~~any one of claims~~
17 ~~to 20~~ with the biological sample to form a mixture; and

c) detecting specifically bound antibody or bound fragment in the mixture which indicates the presence of *S. pyogenes* in the host.

33. (currently amended) A method for the detection of antibody specific to *S. pyogenes* antigen in a biological sample containing or suspected of containing said antibody comprising

- a) obtaining the[[a]] biological sample from a host;
- b) incubating one or more polypeptides according to claim ~~any one of claims 17 to 20 or fragments thereof~~ with the biological sample to form a mixture; and
- c) detecting specifically bound antigen or bound fragment in the mixture which indicates the presence of antibody specific to *S. pyogenes* in the sample.

34. (canceled)

35. (canceled)

36. (currently amended) Kit comprising the[[a]] polypeptide according to claim ~~any one of claims 17 to 20~~ for detection or diagnosis of *S. pyogenes* infection.

37. (currently amended) Kit comprising the chimeric[[a]] polypeptide according to claim ~~any one of claims 21 to 22~~ for detection or diagnosis of *S. pyogenes* infection.